

	Application No.	Applicant(s)	
	•	THIET AI	
Notice of Allowability	09/706,595 Examiner	THI ET AL. Art Unit	
	CHUONG T HO	2664	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	ears on the cover sheet with (OR REMAINS) CLOSED in the or other appropriate communi GHTS. This application is sub-	the correspondence address nis application. If not included cation will be mailed in due course. THIS	e
1. This communication is responsive to <u>09/20/04</u> .			
2. The allowed claim(s) is/are <u>1-67</u> .			
3. $\boxtimes$ The drawings filed on <u>03 November 2000</u> are accepted by	the Examiner.		
4. ☐ Acknowledgment is made of a claim for foreign priority una) ☐ All b) ☐ Some* c) ☐ None of the:  1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must (a) ☐ including changes required by the Notice of Draftspers 1) ☐ hereto or 2) ☐ to Paper No./Mail Date  (b) ☐ including changes required by the attached Examiner's Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in tit 7. ☐ DEPOSIT OF and/or INFORMATION about the depose attached Examiner's comment regarding REQUIREMENT in the comment of the comment regarding REQUIREMENT in the comment regarding requirement sheet (s) should be also as the comment regarding requirement sheet (s) should be also as such as the application regarding requirement sheet (s) should be also as such as the comment regarding requirement sheet (s) should be also as such as the comment regarding requirement sheet (s) should be also as such as the comment regarding requirement sheet (s) should be also as such as the comment of the comme	been received.  been received in Application cuments have been received in of this communication to file a lENT of this application.  itted. Note the attached EXAM is reason(s) why the oath or do to be submitted.  on's Patent Drawing Review (as Amendment / Comment or in least (c)) should be written on the he header according to 37 CFR is it of BIOLOGICAL MATER	No In this national stage application from the reply complying with the requirements  INER'S AMENDMENT or NOTICE OF eclaration is deficient.  PTO-948) attached In the Office action of drawings in the front (not the back) of 1.121(d).  RIAL must be submitted. Note the	
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Sun Paper No./M 8), 7. ☐ Examiner's A	rmal Patent Application (PTO-152) Immary (PTO-413), ail Date mendment/Comment ratement of Reasons for Allowance	

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1. The amendment filed 09/20/04 have been entered and made of record.

## Allowable Subject Matter

2. Claims 1-67 are allowed.

3. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claims 1, 17: "fractionally decimating the data during a data overflow, and fractionally interpolating the data during a data underflow, wherein the data overflow and the data underflow are determined as a function of the offset".

- 4. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claim 4: "fractionally resampling the data as a function of the offset, wherein the offset derivation comprises counting at least a portion of a cycle of the first or second clock, the fractional resampling being a function of the count; and wherein the fractional resampling comprises unsampling the data if the count exceeds a threshold and downsampling the data if the count is below the threshold".
- 5. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claim 5: "fractionally resampling the data as a function of the offset; and filtering the count, the data resampling being a function of the filtered count, wherein

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the offset derivation comprises counting at least a portion of a cycle of the first or second clock, the fractional resampling being a function of the count".

- 6. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claim 14: "fractionally resampling the data as a function of the offset, wherein the offset derivation comprises counting at least a portion of a cycle of the first clock to produce a first clock count, counting at least portion of a cycle of the second clock to produce second clock count, generating an error signal as a function of the first clock count and the second clock count, the fractional resampling being a function of the error signal".
- 7. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claim 20: "fractionally resampling the data as a function of the offset; and receiving the data from the cable head end, the data being clocked by the cable head end clock, wherein the fractional resampling comprises upsampling the data if the count exceeds a threshold and downsampling the data if the count is below the threshold, wherein the offset derivation comprises counting at least a portion of a cycle of the cable head end clock, the fractional resampling being a function of the count".
- 8. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious

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the claimed limitations in combination with the specific added limitations, as recited from independent claim 22: "fractionally resampling the data as a function of the offset; and filtering the count, the fractional resampling of the data being a function of the filtered count, wherein the offset derivation comprises counting at least a portion of a cycle of the cable head end clock, the fractional resampling being a function of the count".

- 9. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claim 37: "a sample tracker adapted to receive sampled data, the sample tracker fractionally decimating the sampled data during a data overflow, and fractionally interpolating the data during a data underflow, wherein the data overflow and the data underflow are determined as a function of the count".
- 10. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claim 38: "a sample tracker adapted to receive sampled data, the sample tracker fractionally resampling the sampled data as a function of the count wherein the sample tracker downsamples the data if the count exceeds a threshold and upsamples the data if the count is below the threshold".
- 11. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from

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independent claim 39: "a sample tracker adapted to receive sampled data, the sample tracker fractionally resampling the sampled data as a function of the count; and a filter between the counter and the sample tracker".

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- 12. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claim 42: "a counter to count the frames of the sampled data, wherein the sample tracker fractionally decimating the sampled data during a data overflow, and fractionally interpolating the data during a data underflow, wherein the data overflow and the data underflow are determined as a function of the count".
- 13. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claim 43: "a counter to count the frames of the sampled data, wherein the sample tracker fractionally resamples the sampled data as a function of the count, and wherein the sample tracker upsamples the data if the count exceeds a threshold and downsamples the data if the count is below the threshold".
- 14. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claim 48: "a sample tracker adapted to receive sampled data, the sample tracker fractionally the sampled data during a data overflow, and fractionally

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interpolating the data during a data underflow, wherein the data overflow and the data underflow are determined as a function of the error signal".

- 15. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claim 49: "a sample tracker adapted to receive sampled data, the sample tracker fractionally the sampled data as a function of the error signal, wherein the data is sampled with the first clock, and sample tracker upsamples the data when the first clock count exceeds the second clock count and downsamples the data when the second clock count exceeds the first clock count".
- 16. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claim 50: "a sample tracker adapted to receive sampled data, the sample tracker fractionally resampling the sampled data as a function of the error signal; and a first filter between the first counter and the sample tracker, and a second filter between the second counter and the sample tracker".
- 17. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claim 53: "adapted to receive sampled data, the sample tracker fractionally decimating the sampled data during a data overflow, and interpolating means, adapted

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to receive sampled data, for fractionally interpolating the sampled data during a data underflow, wherein the data overflow and the data underflow are determined as a function of the error signal".

- 18. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claim 55: "resampling means, adapted to receive sampled data, for fractionally resampling the sampled data as a function of the error signal, wherein the error means comprises counting means for counting at least a portion of a cycle of the first or second clock, the resampling means fractionally resampling the sampled data as a function of the count, and wherein the resampling means further comprises means for upsampling the data if the count exceeds a threshold and means for downsampling the data if the count is below the threshold".
- 19. The following is an examiner's statement of reasons for allowance: the prior art (5956347, 6580432, 5970093) of the record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claim 56: "resampling means, adapted to receive sampled data, for fractionally resampling the sampled data as a function of the error signal; and filtering means for filtering the count, the resampling means fractionally resampling the sampled data as a function of the filtered count, wherein the error means comprises counting means for counting at least a portion of a cycle of the first or second clock, the resampling means fractionally resampling the sampled data as a function of the count".

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Any comments considered necessary by applicant must be submitted no later 20. than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG T HO whose telephone number is (571) 272-3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

03/15/05